

Claims

1. A method for identifying compounds having anti-herpesvirus activity, characterized in that
 - 5 (i) the major capsid protein or one or more fragments of the major capsid protein is/are brought into contact with test compounds, and
 - (ii) the binding of the test substances to the major capsid protein or fragments is measured and
 - (iii) the compounds which exhibit binding to the major capsid protein or fragments are selected.
- 10 2. The method as claimed in claim 1, where the herpesvirus is a human cytomegalovirus (HCMV).
- 15 3. A method for selecting compounds having anti-herpesvirus activity, characterized in that
 - (i) herpesviruses are brought into contact with test compounds,
 - (ii) resistant herpesviruses are selected,
 - (iii) the gene coding for the major capsid protein of these resistant herpesviruses is sequenced, and the resulting protein sequence of the major capsid protein is inferred,
 - (iv) the compounds with which resistant herpesviruses having one or more amino acid substitutions in the major capsid protein occur are selected.
- 25 4. The method as claimed in claim 3, where the herpesvirus is a human cytomegalovirus (HCMV).
5. The use of one or more substances which bind to the viral major capsid protein for producing a medicament for the treatment and/or prophylaxis of infections by herpesviruses.
- 30 6. The use as claimed in claim 5, where the herpesvirus comprises human cytomegaloviruses (HCMV).
- 35 7. The use of one or more substances identified by claims 3 or 4 for producing a

medicament for the treatment and/or prophylaxis of infections by herpesviruses.

8. The use as claimed in claim 7, where the herpesvirus is the human cytomegalovirus (HCMV).

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9. The use as claimed in any of claims 5 to 8, characterized in that the substance(s) used therein permit the formation of non-infectious B capsids but not the formation of infectious C capsids.

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10. The use of one or more substances which permit the formation of non-infectious B capsids but not the formation of infectious C capsids for producing a medicament for the treatment and/or prophylaxis of infectious by human cytomegaloviruses (HCMV).

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11. The use as claimed in any of claims 5 to 6 or 9 to 10, characterized in that viruses resistant to the substance used or to the substances used have one or more mutations in the amino acid sequence of the major capsid protein.

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12. The use as claimed in any of claims 6, 8, 9 or 10, characterized in that one or more mutations in the UL86 protein at one or more of the following positions leads to resistance to the substances:

R435C, D441N, Y522C, D563N, P586T, V601M, R682H, A689T (cluster 1);
P1189T, P1189S, Q1223R, A1226T, E1320Q, K1338N (cluster 2).

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13. The use as claimed in claim 12, where there are one or more mutations between amino acids 400 and 700, and 1150 and 1370.

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14. A method for inhibiting the replication of herpesviruses by substances which act on the major capsid protein.

15. The method as claimed in claim 14, where the formation of C capsids but not of B capsids is inhibited.

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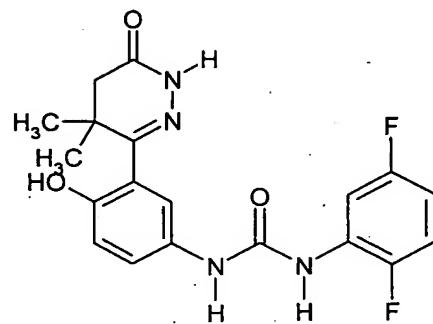
16. Method according to 14 or 15, where the herpesvirus is a human cytomegalovirus.

17. The use of substances which inhibit the replication of HCMVTowne only inadequately or not at all and inhibit the replication of wild-type HCMV strains for producing medicaments for the therapy and prophylaxis of HCMV infections.

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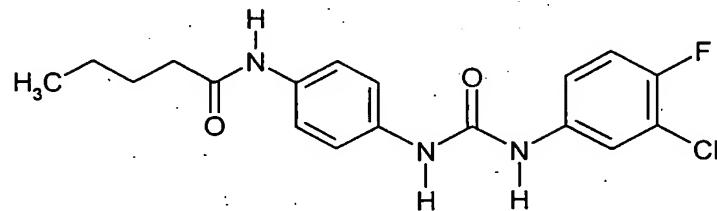
18. A medicament produced by one of the methods as claimed in claims 5 to 17.

19. A compound of the formula

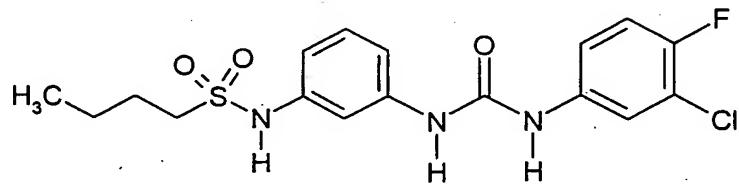


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20. A compound of the formula

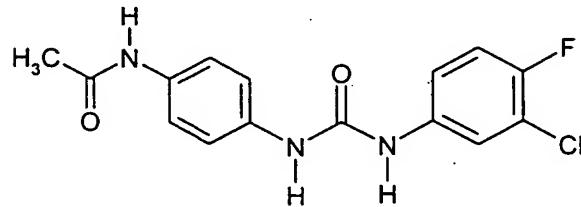


21. A compound of the formula



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22. A compound of the formula



for the treatment and/or prophylaxis of diseases.